

**REPORT OF THE CHIEF ENGINEER OF
THE FIRE DEPARTMENT
OF THE DISTRICT OF COLUMBIA**

**FOR THE FISCAL YEAR
ENDED JUNE 30, 1922**



**WASHINGTON
GOVERNMENT PRINTING OFFICE
1922**

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COMMISSIONERS OF THE DISTRICT OF COLUMBIA,
HEADQUARTERS OF THE FIRE DEPARTMENT,
Washington, July 1, 1922.

To the COMMISSIONERS OF THE DISTRICT OF COLUMBIA:

I submit the following report of the transactions of the fire department during the fiscal year ended June 30, 1922:

During the year 1,997 alarms of fire were received, an increase of 223 over the number received during the preceding year. Of these alarms 990 were box alarms and 1,007 local or telephone calls. Of the alarms received 181 were false, an increase of 36 over the preceding year. Fifteen arrests for the sounding of false alarms were made by the police department; six convictions were obtained.

During the year 15 fires of suspicious or presumably incendiary origin occurred, but sufficient evidence could not be obtained after careful investigation by the fire marshal and the police department to warrant court action.

The total loss by fire during the fiscal year is estimated at \$1,179,803, covered by an insurance of \$25,678,231.

The total fire loss during the year was an increase of \$259,821 over the loss for the preceding year. Approximately one-half of the entire loss was caused by two fires, one of which occurred on October 21, 1921, in the National Hotel (loss \$138,662); the other on April 23, 1922, in the Willard Hotel (loss \$400,081).

FIRE PREVENTION.

During the fiscal year every apartment house, hotel, school, home for the aged, etc., in the District of Columbia was inspected at least once in each six days by a uniformed member of the fire department. This work is assigned to the members under the command of the battalion chief engineers of the department, and has practically eliminated trash and rubbish fires in the buildings inspected. The work mentioned is in addition to that performed by the force under the supervision of the fire marshal, the time of these members of the department being taken up with inspection of mercantile establishments, supervision over the storage and sale of inflammables, the enforcement of fire prevention regulations in places of public assembly, the abatement of fire hazards reported by the inspectors in the battalion districts, etc. A more frequent inspection of mercantile establishments is much to be desired, but can not be accomplished at the present time owing to insufficient personnel.

DISCIPLINE.

During the year the commissioners removed five members from the service of the department upon the recommendation of the trial board. Minor disciplinary measures were administered in 74 cases.

PENSIONS.

The following pensions were granted during the year:

G. F. Burga, private, retired July 15, 1921, and granted relief in the amount of \$69.16 per month.

G. S. Helff, captain, retired August 15, 1921, and granted relief in the amount of \$79.16 per month.

E. G. Decker, captain, retired August 31, 1921, and granted relief in the amount of \$79.16 per month.

W. W. Rollins, lieutenant, retired August 31, 1921, and granted relief in the amount of \$73.33 per month.

G. S. Boyd, private, retired September 15, 1921, and granted relief in the amount of \$69.16 per month.

G. G. Warren, private, retired September 15, 1921, and granted relief in the amount of \$69.16 per month.

Mrs. Ida V. Guy, widow of the late Captain J. O. Guy (a pensioner at the time of his death), was granted relief in the amount of \$35 per month, effective October 15, 1921.

L. W. Trower, private, retired October 15, 1921, and granted relief in the amount of \$69.16 per month.

T. J. Donohoe, battalion chief engineer, retired November 1, 1921, and granted relief in the amount of \$100 per month.

Mrs. Florence Specht, widow of the late private George J. Specht, was granted relief in the amount of \$35 per month, effective October 29, 1921.

W. J. McElwee, private, retired November 30, 1921, and granted relief in the amount of \$69.16 per month.

P. N. Jeffries, private, retired December 15, 1921, and granted relief in the amount of \$69.16 per month.

T. P. Purcell, private, retired January 31, 1922, and granted relief in the amount of \$69.16 per month.

Henry Lambert, private, retired January 31, 1922, and granted relief in the amount of \$69.16 per month.

J. C. Harper, private, retired January 31, 1922, and granted relief in the amount of \$69.16 per month.

P. J. Carroll, private, retired January 31, 1922, and granted relief in the amount of \$69.16 per month.

C. E. Harper, captain, retired January 31, 1922, and granted relief in the amount of \$79.16 per month.

Mrs. Cora A. Long, widow of the late Sergt. Marshall B. Long, was granted relief in the amount of \$35 per month for her personal use and \$10 and \$5 each, respectively, for the use of her two children, effective March 6, 1922.

The relief of Mrs. Mary O'Leary, widow of the late Private Jeremiah O'Leary (a pensioner at the time of his death), was increased from \$25 to \$35 per month, effective March 31, 1922.

J. E. Hooper, captain, retired May 8, 1922, and granted relief in the amount of \$79.16 per month.

A. E. Cooper, private, retired May 31, 1922, and granted relief in the amount of \$69.16 per month.

E. C. Moyer, private, retired June 8, 1922, and granted relief in the amount of \$69.16 per month.

B. S. Follin, private, retired June 8, 1922, and granted relief in the amount of \$69.16 per month.

DEATHS.

During the year Sergt. Marshall B. Long died on March 6, 1922, and Pvt. G. J. Specht on October 29, 1921. Pensioner Joseph O. Guy died on August 21, 1921.

HORSES.

On July 1, 1921, there were 74 horses in the department. During the year 6 were purchased, 2 died, and 7 were transferred to other departments.

TRAINING SCHOOL.

The department is at the present time without proper facilities for the training of its members in the saving of life and property from fire. A drill tower is urgently needed. Previous efforts made by the commissioners to obtain appropriations from Congress for this very important item have been unsuccessful, but it is hoped that favorable action may be obtained in the near future, and that this long-felt need of the department will be supplied.

MOTORIZATION.

The department still has in active service six pieces of horse-drawn apparatus. Practically every piece of reserve apparatus is horse drawn. I hardly feel it necessary to state that the use of such apparatus in an up-to-date fire department is antiquated. From the standpoint of efficiency in service and economy of maintenance, the department apparatus, active and reserve, should be completely motorized.

SALARIES.

The officers and members of the fire department are now receiving the \$240 bonus in addition to their basic salaries. In many instances these amounts are insufficient to properly compensate the men for the services which they render, taking into consideration the long hours of duty, the abnormal prices of house rent, food, and clothing; and the fact that firemen are required to furnish their own uniforms, not only those for street wear but their so-called "running clothes," consisting of waterproof coats and trousers, rubber boots, and fire helmets. The men are wearing summer uniforms throughout the entire year, as it has been deemed inadvisable, in view of their rates of compensation, to require them to purchase a separate uniform for cold weather. Salaries in the District of Columbia Fire Department are in general less than those paid in other comparable cities throughout the United States.

ANNUAL LEAVE.

The officers and members of the department are now allowed but 20 days annual leave. Other Government employees, whose hours of duty are much shorter than those of the members of the fire department, are entitled to 30 days annual leave, and it is recommended that the furlough granted firemen be increased by 10 days.

THEATER DETAILS.

The fire department at present details a uniformed member of its force at each performance (involving the use of movable scenery) given in any theater in the District of Columbia. This detail, I believe, should be extended to include the larger motion-picture houses, as the necessity for supervision of the handling of the audiences and the enforcement of fire-prevention regulations is fully as important in the latter as in the former. The present force is numerically insufficient to provide for these additional details, and it is recommended that sufficient additional men be obtained to permit the same.

KNICKERBOCKER DISASTER.

At 9.09 p. m., on Saturday, January 28, 1922, during one of the heaviest snowfalls which has visited the District of Columbia for many years, the fire department received an alarm of fire from box 817, Eighteenth Street and Columbia Road NW. Four engine companies, two truck companies, the second battalion chief and the fourth battalion chief responded to the box referred to, all the apparatus and the chiefs mentioned being very much delayed in reaching the box by the heavy fall of snow, which rendered the passage of apparatus and vehicles very difficult, and in fact caused some streets to be practically impassable.

At 9.22 p. m., a second alarm was received from this box, and I responded to the same from No. 2 Engine House.

Upon arrival at the box I found that the roof of the Knickerbocker Theater, southwest corner of Eighteenth Street and Columbia Road, had collapsed and that a great number of persons had been buried in the ruins. I immediately directed a fourth alarm to be sounded, and at 9.43 p. m. sent in a fifth alarm in order to secure additional men for the rescue work. Fire-alarm headquarters was also directed to summon the commissioners, the engineer assistants to the engineer commissioner, and to have every available ambulance, the board of police and fire surgeons, and all other available physicians and nurses called. United States soldiers, sailors, and marines; nurses and physicians from Walter Reed Hospital; physicians and surgeons of Washington; contractors and builders; and every other source of assistance was called and pressed into service. The United States Navy Yard and the wrecking crews from the street railway companies responded promptly to a call for appliances for rescue work, the most essential being acetylene cutting torches which were absolutely necessary to cut structural steel and the wire meshes of concrete slabs which had to be reduced in size before they could be removed. Every member of the fire department on the off platoon was called for duty. The total fire-department apparatus engaged during this emergency consisted of 20 engine companies, the water tower, 7 truck companies, the chief engineer, the deputy chief engineer, three battalion chief engineers, the superintendent of machinery and his force of mechanics, the fire marshal and his assistants, and all members of the department assigned to department headquarters. The response of the apparatus and men was of course terribly delayed by road conditions due to the storm, which

was then at its height, and an idea of the difficulty encountered can be gathered from the fact that all apparatus which responded on the fifth alarm, two engines, two trucks, and three hose wagons became disabled or stalled in the snow and failed to reach the scene of the disaster.

The rescue work in connection with this accident was under the direction of the fire department, and the various detachments of soldiers, sailors and marines, and citizens cooperated with the department in perfect harmony and rendered most heroic and efficient service.

The task of removing the injured and dead from the ruins was completed at 1.07 a. m., on Monday, January 30, 1922, and the various units of the fire department were returned to their quarters.

While the department was engaged at the Knickerbocker Theater, word was received from fire-alarm headquarters at 11.40 p. m. that a second alarm had been sounded for a fire at box 245, Fourteenth and U Streets NW. Owing to the shortage of men and apparatus in quarters to respond to this alarm, I gathered together from the companies working at the Knickerbocker a sufficient number of men to make two companies and sent them with apparatus to the fire with instructions to report back to the Knickerbocker Theater when the fire was extinguished.

At 2.45 a. m. word was received from fire-alarm headquarters that a third alarm had been received for a fire at box 329, Seventeenth and H Streets NW. I followed the same procedure for this alarm, as in the case of the alarm received from box 245, gathering together sufficient men to constitute three companies and sending them with their apparatus to the fire, with instructions to report back to the Knickerbocker Theater as rapidly as they could be spared.

At 8.15 a. m. word was received from fire-alarm headquarters that an alarm had been sounded from box 271, Eighteenth and T Streets NW., due to the collapse of roofs on a row of dwellings. I responded to this box myself, and found that the roofs of several dwellings had fallen in but that no casualties had resulted. I directed that the occupants be instructed to leave the same and placed the police department in charge.

Being in charge of the work referred to, no one is in a position to appreciate more than I the highly efficient assistance rendered the fire department by the citizenry of our city. Especial mention can properly be made, I feel, of the assistance given by the public utility corporations, the Army, Navy, and Marine Corps; the navy yard authorities; builders and contractors; the Red Cross and the Salvation Army; the Town and Country Club, which opened its building and dispensed hot coffee and edibles to all engaged in the rescue work; the physicians and surgeons and the members of the clergy and priesthood; the Walter Reed Hospital and its force of nurses and surgeons; the hospitals and others who furnished ambulances, and others who volunteered and gave such splendid service; the hotels, restaurants, and private citizens who sent coffee and food in abundance.

Never in its history has the fire department been called upon to cope with a situation such as existed during these hours. The road conditions were worse than any in my memory, and the handling of the Knickerbocker disaster alone would have taxed our resources

almost to the limit. The addition of the two additional alarm fires created a condition which was unprecedented in the District of Columbia, and the fact that the situation was handled in a satisfactory manner will always be a lasting memorial to the officers and members of the fire department, upon whom fell the brunt of the work. Nothing that I can say can add to the record of these men. They were most highly commended at the time by the commissioners, civic organizations, and the public in general. Many of the injured who are living to-day survive by reason of their courageous efforts.

A detailed report of the killed and injured will be found in the report of the fire marshal herewith.

NEW APPARATUS.

During the year the following new apparatus and appliances were purchased and placed in service:

One aerial hook and ladder truck, motor driven, was received January 21, 1922, and placed in service March 20, 1922, in No. 4 Truck Company.

One city service truck, motor driven, was received November 21, 1921, and placed in service December 15, 1921, in No. 11 Truck Company.

One motor pumping engine was received December 23, 1921, and placed in service March 4, 1922, in No. 15 Engine Company.

One motor pumping engine was received December 23, 1921, and placed in service April 20, 1922, in No. 26 Engine Company.

One motor pumping engine was received December 27, 1921, and will be placed in service about July 10, 1922, in No. 17 Engine Company.

One combination chemical and hose wagon, motor driven, was received December 20, 1921, and placed in service January 20, 1922, in No. 15 Engine Company.

One combination chemical and hose wagon, motor driven, was received December 20, 1921, and placed in service April 10, 1921, in No. 26 Engine Company.

One combination chemical and hose wagon, motor driven, was received December 27, 1921, and placed in service June 15, 1922, in No. 17 Engine Company.

One water tower, motor driven, was received January 19, 1922, and placed in service January 27, 1922, in No. 3 Truck Company.

One Cadillac automobile (4-P), received October 6, 1921, from United States Shipping Board, Philadelphia, Pa.

One Cadillac automobile (7-P), received November 17, 1921, from United States Shipping Board, Philadelphia, Pa.

Six Burrell gas masks were purchased and placed in service November 12, 1921, in No. 14 Engine Company and Nos. 3 and 6 Truck Companies.

Two Gibbs oxygen breathing apparatus were purchased and placed in service October 11, 1921, in Nos. 3 and 6 Truck Companies.

The unusually severe weather conditions encountered during the year, together with the unusual number of large fires, resulted in the disabling of a great many pieces of apparatus. As the department was not equipped with reserve motor apparatus to replace that which was disabled, it was essential that repairs be made without

delay. These repairs were completed as promptly as possible, and due to an insufficient appropriation it was necessary to expend approximately \$6,000 from the District of Columbia emergency fund.

At the request of the commissioners the United States Government, being informed of some of the more vital needs of the fire department, transferred during the year to the District of Columbia the following vehicles, tools, and equipment, which have been of very material aid to the service (only the more important of the equipment furnished is listed below):

One Hudson sedan automobile, received April 26, 1922, from Camp Holabird, Md.

Three Dodge roadsters, received April 26, 1922, from Camp Holabird, Md.

Two Dodge roadsters, received June 9, 1922, from Camp Holabird, Md.

One Nash Quad motor truck, received March 25, 1922, from Elkridge, Md.

One light aviation motor truck, received March 25, 1922, from Elkridge, Md.

One heavy aviation motor truck, received March 25, 1922, from Elkridge, Md.

One searchlight motor truck, received April 5, 1922, from Camp Dix, N. J.

Five jacks, screw, with handles.

Twelve floodlights, electric, 660 w., 600 v.

Twelve cutting torches, oxyacetylene.

Fifty drills, Star.

Ninety-six extinguishers, carbon tetrachloride.

RECOMMENDATIONS.

Detailed recommendations for the upkeep and improvement of the fire department service were forwarded to the commissioners on August 1, 1922, and it is urgently requested that the same receive approval, and that an effort be made to obtain the necessary appropriations from Congress.

CONCLUSION.

I can not too highly express my appreciation of the services which have been rendered by the officers and members of the fire department during the year just concluded. During the winter weather conditions were abnormally bad, and the department was called upon to combat more large fires than in any like period during its existence. It is a source of great gratification to me to know that the efforts of the men in each individual case were such as to produce the results obtained and to warrant the praise and commendations which have been given them.

I express to the commissioners my sincere thanks for the assistance they have rendered me and for their wholehearted cooperation.

GEO. S. WATSON,
Chief Engineer.

APPENDIX I.

REPORT OF THE FIRE MARSHAL.

WASHINGTON, *July 1, 1922.*

To the CHIEF ENGINEER, DISTRICT OF COLUMBIA FIRE DEPARTMENT:

I submit the following report of transactions of the fire marshal's office for the fiscal year ending June 30, 1922:

During the year 1,997 alarms of fire were received and investigated by this office. This is an increase of 223 as compared with the number received during the preceding year. Of this 1,997 alarms of fire 990 were box alarms, an increase of 132 box alarms over the number received during the preceding year, and 1,007 were local or telephone calls, an increase of 91 over the number received during the preceding year.

The loss caused by the 990 box alarms is estimated at \$1,141,584, part of which was covered by insurance of \$17,143,296. The loss caused by the 1,007 local alarms was estimated at \$38,219, part of which was covered by insurance of \$8,534,935.

The total loss for the fiscal year is estimated at \$1,179,803, which is a fraction over 4.59 per cent of the total insurance of \$25,678,231.

During the year 23 fires occurred for which additional alarms were received. They are as follows:

August 23, 1921, box 145 at 2.48 a. m., followed by a second alarm at 3.05 a. m., for fire in two-story office building located at 500-508 Fourteenth Street NW. (United States Coast Guard); estimated loss.....	\$55,000
September 9, 1921, box 158 at 4.48 p. m., followed by a second alarm at 4.52 p. m., for fire in two three-story brick commission houses located at 926 and 928 Louisiana Avenue NW.; estimated loss.....	32,286
October 2, 1921, box 184 at 2.28 a. m., followed by a third alarm at 2.53 p. m., and a fifth alarm at 3.52 a. m., for fire in five-story brick hotel and stores located at Sixth Street and Pennsylvania Avenue NW. (National Hotel); estimated loss.....	138,662
October 3, 1921, box 266 at 6.03 p. m., followed by a second alarm at 6.08 p. m., and a third alarm at 6.18 p. m., for fire in two-story brick planing mill and wood working shop located at Nos. 1339-1341 W Street NW; estimated loss.....	13,573
October 10, 1921, box 214 at 3.30 a. m., followed by a second alarm at 3.37 a. m., for fire in one-story frame junk shop, two-story brick cafe, and three-story frame and brick secondhand store and dwelling located at 2023, 2025, 2029, and 2031 Georgia Avenue NW.; estimated loss.....	8,100
November 27, 1921, box 191 at 4.53 a. m., followed by a third alarm at 4.57 a. m. and a fourth alarm at 5.10 a. m. At 5.03 a. m. box 145 was also pulled for this fire, which was in five-story iron and brick furniture stores located at 906, 908, 910, 912 and 914 Pennsylvania Avenue NW.; estimated loss.....	86,900
January 21, 1922, box 15 at 6.05 p. m., followed by a second at 6.09 p. m., assisted by No. 3 Engine Company and No. 1 Truck Company at 6.04 p. m. on local, for fire in two-story brick stable and flour mill located at First St. and Indiana Avenue NW.; estimated loss.....	5,320
January 28, 1922, box 245 at 11.25 p. m., followed by a second at 11.40 p. m., for fire in two four-story brick apartment houses located at 1927 and 1929 Fourteenth Street NW.; estimated loss.....	13,050
January 29, 1922, box 329 at 2.56 a. m., followed by a second alarm at 2.57 a. m. and a third alarm at 3.43 a. m., for fire in three three-story brick apartment, dwelling, and rooming houses located at 1714, 1716, and 1718 H Street NW.; estimated loss.....	31,650
February 8, 1922, box 151 at 3.32 p. m., followed by a third alarm at 3.36 p. m., for fire in four-story stone building (United States Treasury) located at Fifteenth Street and Pennsylvania Avenue NW.; estimated loss.....	12,000
February 15, 1922, box 152 at 3.02 p. m., followed by a second alarm at 3.04 p. m. and a third alarm at 3.06 p. m., for fire in a three-story brick hardware store, commission house, and feed store located at 1001 and 1003 B Street NW.; estimated loss.....	10,500

February 20, 1922, box 16 at 9.07 p. m., followed by a second alarm at 9.10 p. m., fire in three-story iron and brick wholesale grocery store located at 608 Pennsylvania Avenue NW.; estimated loss.....	\$5, 500
Feb. 24, 1922, box 342 at 9.56 a. m., followed by a second alarm at 10.10 a. m., for fire in four-story brick apartment house located at 814 Twenty-second Street NW.; estimated loss.....	4, 135
Mar. 5, 1922, box 154 at 1.30 a. m., followed by a second alarm at 1.36 a. m., and a third alarm at 1.38 a. m., for fire in two-story brick lunch room and commission houses located at 915 and 917 B Street NW.; estimated loss.....	4, 850
Apr. 8, 1922, box 144 at 2.23 a. m., followed by a second alarm at 2.34 a. m., assisted by No. 6 Truck Company at 2.50 a. m., for fire in nine-story brick office building located at northeast corner of Fifteenth and H Streets NW. (Southern Building); estimated loss.....	14, 996
Apr. 23, 1922, box 151 at 5.49 a. m., followed by a third alarm and a fifth alarm at 6.12 a. m., for fire in Willard Hotel, a 12-story brick building located at Fourteenth Street and Pennsylvania Avenue NW.; estimated loss.....	400, 081
Apr. 24, 1922, box 124 at 8.02 p. m., followed by a second alarm at 8.11 p. m., for fire in six-story brick lodging house located at 622 Louisiana Avenue NW.; estimated loss.....	650
Apr. 29, 1922, box 734 at 3.17 a. m., followed by a second alarm at 3.23 a. m., assisted by No. 5 Engine Company and No. 5 Truck Company on local at 3.15 a. m., for fire in three 2-story frame dwellings located at 1415, 1417, and 1419 Thirty-third Street NW.; estimated loss.....	3, 550
May 1, 1922, box 131 at 6.38 a. m., followed by a second alarm at 6.44 a. m., for fire in three-story brick drug store; located at 904 F Street NW.; estimated loss.....	18, 750
May 1, 1922, box 148 at 1.48 p. m., followed by a fourth alarm at 1.54 p. m., for fire in a six-story apartment house and hotel (brick) located at Fourteenth Street and Vermont Avenue NW.; estimated loss.....	6, 350
May 3, 1922, box 151 at 1.45 a. m., followed by a third alarm at 1.54 a. m., and a fifth at 2.03 a. m., for fire in a four-story stone building located at Fifteenth Street and Pennsylvania Avenue NW. (United States Treasury); estimated loss.....	25, 000
May 11, 1922, box 135 at 11 p. m., followed by a second alarm at 11.04 p. m., for fire in four-story brick women's suit store located at 1113 G Street NW.; estimated loss.....	25, 000
June 27, 1922, box 985 at 4.06 p. m., followed by a second alarm at 4.23 a. m., for fire in two-story brick wholesale grocery storage house located in rear of 3330-3332 M Street NW.; estimated loss.....	16, 500
Loss for fires where additional alarms were sounded.....	932, 403

The fire department was called out on one other occasion for which additional alarms were sounded, but as this was not a fire the property loss is not included in the statement of fire losses, viz:

Jan. 28, 1922, box 817 at 9.09 p. m., followed by a second alarm at 9.22 p. m., a fourth at 9.39 p. m., and a fifth at 9.43 p. m., to assist in the rescue work at the Knickerbocker Theater when the roof collapsed. This was a three-story brick and tile motion-picture theater located at 2454 Eighteenth Street NW.; estimated loss.....	\$110, 000
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In addition to the foregoing, for which additional alarms were sounded six fires occurred in the District of Columbia, for which single alarms were sounded and where the loss for each exceeded \$5,000. They were as follows:

July 5, 1921, box 643 at 9.56 a. m., for fire in a two-story brick paper warehouse located in rear of 1337 H Street NE.; estimated loss.....	\$26, 000
Nov. 1, 1921, box 124 at 8.17 p. m., for fire in three-story brick shoe store located at 310-312 Seventh Street NW.; estimated loss.....	9, 452
Jan. 1, 1922, box 622 at 7.13 p. m., for fire in Union Station, a five-story stone railroad station located at Massachusetts and Delaware Avenues NE.; estimated loss.....	6, 400
Mar. 24, 1922, box 124 at 6.39 p. m., for fire in three-story brick shoe store located at 310-312 Seventh Street NW.; estimated loss.....	6, 250

Mar. 26, 1922, box 1221 at 4.51 a. m., for fire in three-story brick wall-paper store and apartment house located at 930 New York Avenue NW.; estimated loss	\$6, 000
May 25, 1922, No. 12 Engine Company and No. 4 Truck Company on local at 3.34 a. m., for fire in pile of lumber at Fifth Street and Florida Avenue NE.; estimated loss.....	6, 000
Total loss for these six single alarms.....	60, 102

The foregoing 23 fires, for which additional alarms were sounded, and the 6 fires, for which single alarms were sounded, with a loss in excess of \$5,000 each, caused a total loss of \$992,505, which leaves a loss of \$187,298 for the remaining 1,968 alarms of fire.

The fire department was called upon on six other occasions, one being a single-box alarm, and the others local alarms, where the loss exceeded in each case \$5,000, but not included in the District of Columbia losses. Five of these were fires outside of the District of Columbia, and the other was the collapsing of a roof, all of which are noted below:

July 19, 1921, No. 22 Engine Company on local at 4.01 a. m. for fire in two-story and attic frame building occupied as a sanitarium and dwelling, located at Sligo, Md.; estimated loss.....	\$16, 000
Sept. 10, 1921, No. 1 Fire Boat on local at 8.05 p. m., for fire in two-story frame and tile buildings occupied by the Virginia Shipbuilding Corporation as shipbuilding and storage warehouses at Alexandria, Va.; estimated loss..	262, 000
Nov. 13, 1921, No. 28 Engine Company on local for fire in two-story and basement brick and frame armory and municipal building located at Kensington, Md.; estimated loss.....	32, 000
Jan. 31, 1922, box 617 at 4.57 p. m., collapsing of roof on account of heavy weight of snow on same, Baltimore & Ohio R. R. Co.'s freight shed located at New York and Florida Avenues NE.; estimated loss.....	10, 000
Apr. 24, 1922, No. 22 Engine Company on local at 12.42 a. m., fire in two-story brick post office, general merchandise store, and apartment house located at Forest Glen, Md.; estimated loss.....	16, 000
May 6, 1922, No. 5 Engine Company on local at 8.38 p. m., for fire in one-story frame garage and automobile located at Fort Myer, Va.; estimated loss....	6, 500

FIRE LOSS.

The loss for the fiscal year when compared with the loss for the preceding year is an increase of \$259,821. One-half of this entire loss was caused by two fires, one of which occurred at the National Hotel on October 21, 1921, in which the loss was estimated at \$138,662; the other occurred at the Hotel Willard on April 23, 1922, in which the loss was estimated at \$400,081. Both of these fires had gained much headway before being discovered, especially in case of the latter. This latter fire had almost enveloped the entire banquet hall before the fire department was called. Owing to its high location, it was an unusually difficult one to fight, and it was remarkable that no serious casualties occurred to any of the men of the department considering the perilous positions they were compelled to take in order to fight this fire.

In addition to these losses, another large loss occurred in the District of Columbia during the fiscal year for which the fire department was called upon, and which, not being a fire loss, is not included in the fire-loss statement, i. e., collapsing of the roof of the Knickerbocker motion-picture theater January 28, 1922, which, as stated before in this report, involved a property loss estimated at \$110,000, in addition to 127 persons being injured and 97 killed. The fire department was called upon to assist in rescuing people who were in this theater at the time the disaster occurred and digging from under the debris those who were killed. In responding to the alarms in connection with this calamity a number of the department's apparatus were disabled on account of the exceedingly bad condition of the streets due to the deep bed of snow on same, which created the worst traffic conditions experienced in this city for many years. While the rescue work was in progress two fires of considerable proportions occurred in other sections of the city, and it was found necessary to withdraw several of the companies assisting in this rescue work and dispatch them to aid in extinguishing these fires.

The system inaugurated by the chief engineer of the fire department in sending firemen from the various fire stations to make inspections of apartment houses, hotels, hospitals, asylums, and various buildings has shown excellent results. Among the fires that occurred in the District of Columbia during the fiscal year eight of them

created a loss of \$794,579, which is the bulk of the fire losses for the year, and of these eight fires the origin was not found to be from accumulation of trash or other conditions over which the men sent out by the various companies or the inspectors of this office have control. For instance, the fire at the United States Coast Guard was caused by careless smoking, the loss amounting to \$55,000; National Hotel, careless smoking, loss \$138,662; Golden & Co., short circuit of electric wires, loss \$32,286; H. Baum & Son's furniture warehouse, loss \$86,900, attributed to spontaneous combustion; apartments, dwellings, and rooming houses at 1714, 1716, and 1718 H Street NW., loss \$31,650, overheated hot-air furnace; Treasury Building, loss \$25,000, Bunsen burner left burning; ladies' suit store at 1113 G Street NW., loss \$25,000, unknown origin; and Hotel Willard, loss \$400,081, careless smoking.

During the year the fire department responded to 29 fires at near-by points in Maryland and Virginia and rendered all possible aid in extinguishing them and preventing their spread. The total estimated loss caused by these 29 fires was \$341,925.

PRINCIPAL CAUSES OF FIRE.

Ashes placed in wooden containers or thrown against woodwork.....	25
Automobiles backfiring, electric wires short-circuiting.....	161
Brush, grass, leaves, and trash.....	223
Chimneys, soot in, sparks from, smoke from, and defective.....	151
Gas (illuminating), careless use of, defective fixtures.....	46
Matches, careless use of, children playing with, rats causing matches to light....	315
Smoking, careless.....	196
Stoves, furnaces, heating plants, latrobes, stovepipes—sparks from defective, overheated, too near combustible material.....	138

FALSE ALARMS.

During the year 181 false alarms of fire were received, an increase of 36 as compared with the preceding year. Fifteen arrests were made in this connection. Although this is a very small percentage, taking into consideration the number of false alarms that were turned in, the police department, however, were diligent in their investigations of these false alarms, and nothing was neglected in their efforts to apprehend the guilty parties. As has been the case in past years, no evidence whatever could be obtained in the majority of cases. Of the 15 arrests made, 1 white boy was punished by his father by order of the juvenile court, a white man was found guilty and fined \$100, a white girl and white boy were put on probation by the court, a colored man was sentenced to serve 90 days in jail, and a white girl was found to be demented and released. In the remaining cases the parties were found not guilty by the court and released.

INCENDIARY AND SUSPICIOUS FIRES.

During the year 13 fires occurred that appeared to be of a suspicious nature and two that were presumably of an incendiary origin, but in any of these cases sufficient evidence could not be obtained to warrant this department to take court action.

FOURTH OF JULY FIRES.

Despite the prohibition placed on the sale and use of explosives in connection with Fourth of July celebration, seven fires occurred which were caused by fireworks during the Fourth of July celebration, 1921, involving a loss of \$1,315.

INFLAMMABLE OILS, AMMUNITION, AND EXPLOSIVES.

During the year 980 applications to handle kerosene were received and acted upon by this office. The diminishing use of kerosene in homes and the handling of it by gasoline stations is gradually reducing the sale of it in stores.

Close attention is being paid to the location of the kerosene storage tank. Permission is not given to store kerosene tank in cellar unless the pump is on the first floor. Tanks located on the first floor must be placed near the entrance doors for the purpose of easy removal in case of fire, and so that it can also be seen that the portion of the store surrounding the tank is kept clean.

By prohibiting the installation of kerosene tanks whereby it is necessary to go into the cellar to draw oil, has lessened the likelihood of sellingsame after dark with the light of open flame.

The 704 gasoline-tank installations now in the District of Columbia are both public stations and private tanks. During the year nearly all of the public gasoline stations have installed additional tanks.

The substituting of oil for coal as fuel has resulted in the issuing of 131 permits for the installation of oil-burning equipment and storage tanks during the fiscal year. This equipment has been installed principally in private homes, and the constantly increasing number of installations has caused the necessity of drawing regulations controlling these installations, the drafting of which is now in process.

During the year 52 licenses were approved to handle ammunition for small arms other than cartridges for pistols.

INSPECTIONS.

The number of inspections made during the year by the corps of inspectors connected with the fire marshal's office was 53,685; of this number there were 1,329 complaints. Six thousand seven hundred and ninety-two notices were served to remedy conditions creating fire hazards, and it was found necessary to take only a small percentage of these cases to court, thus evidencing the fact that the public generally have been cooperating with this office.

In addition to the above, 105,799 inspections were made of apartment houses, hotels, asylums, private schools, etc., by firemen connected with the different fire stations.

A thorough and complete inspection was made of all public schools by the deputy fire marshal and recommendations made to remedy certain defects.

MOTION-PICTURE THEATERS AND OTHER THEATERS.

All motion-picture theaters and open-air motion-picture parks in the District of Columbia were inspected to see that all fire appliances were in proper working order prior to issuance of annual licenses. Each motion-picture theater and each open-air motion-picture park, in addition to the foregoing inspections, was inspected by members of the fire marshal's office at least once each week while the theater or park was open to the public. All told there were 57 motion-picture theaters and motion-picture parks in operation during the year. In addition to these there were in operation 11 so-called "legitimate theaters."

Notices were served on a large percentage of the managers of all these places of entertainment to make certain alterations and in other ways remedy defects so as to have their places in compliance with the fire regulations, the work of which, in most instances, has been completed, and that which has not is well under way.

A uniformed member of the fire department was detailed for duty at each performance held in the "legitimate theaters." All scenery arriving in the District of Columbia for use in any of them was tested as to fireproof qualities, and if found not to stand the test the managers were required to treat it with a fireproof solution or else remove it from the theater before giving a performance.

In many halls and places of public assembly, where entertainments were held, one or more uniformed firemen were in attendance during such entertainments, and it was seen by members of this office that all scenery and decorations of a combustible nature used in connection with these gatherings were made fireproof.

MOTION-PICTURE MACHINE OPERATORS.

At the present time applicants for licenses to operate motion-picture machines in the District of Columbia are required to submit to a written examination taken in the office of the fire marshal, questions having been prepared by the electrical engineer of the District of Columbia, and all examinations are gone over in his office and there rated.

MOTION-PICTURE FILM EXCHANGES.

The new regulations made by the Commissioners of the District of Columbia governing motion-picture exchanges went into effect March 3, 1922. In some cases an extension of three months was given to comply with these regulations. Those who have not complied with the regulations have either removed their exchanges from the city or have the work of compliance well under way.

RECOMMENDATIONS.

As in last year's report I recommend that the position with the title of chief inspector be created in the fire marshal's office. The number of inspectors in the fire marshal's office has increased to such an extent that it requires the full time of one man to properly supervise and record the work performed by them. It is proposed to have this chief inspector take immediate charge of the inspectional force in office of the fire marshal; to be responsible for the serving and enforcement of notices by the inspectors; to have charge of and be responsible for the keeping of inspectional reports and records; and to act, when necessary, for the deputy fire marshal and the fire marshal in their absence. The position referred to was recommended by the Congressional Joint Committee on Reclassification.

That 10 additional inspectors be provided for the fire marshal's office. While it is true that the inspection force is assisted by privates detailed from the fire department, it must be borne in mind that such details are but temporary in character and necessarily can continue only so long as conditions in the fire fighting force of the fire department may warrant. The present force is, therefore, subject at any time to reduction to such an extent as to render practically impossible a proper enforcement of the fire-prevention regulations.

CONCLUSION.

In concluding this report I wish to express my sincere thanks to the members connected with the fire marshal's office for their hearty cooperation given me during the past year, and also to the members of the various fire stations who assisted in the work of inspecting and reducing fire hazards.

The fire loss as mentioned in this report is in excess of that of the preceding fiscal year, but this excess is accounted for by the fire which occurred at the Willard Hotel on April 23, 1922, the details of which are hereinbefore mentioned. During the past fiscal year there was a marked increase in the number of apartment houses, dwellings, garages, and other structures, in addition to a greatly increased number of automobiles in the District of Columbia, over that of preceding years, thus increasing fire hazards accordingly.

I extend to you my thanks for the cooperation and assistance that you have given me in the conduct and operation of the fire marshal's office.

L. V. SEIB, *Fire Marshal.*

TABLE NO. 1.—Number of alarms responded to by companies.

	First alarm.	Second alarm.	Third alarm.	Fourth alarm.	Fifth alarm.	Sixth alarm.	Local alarm.	Time worked engine.	Hose laid.	Hose burst.	Ladders raised.	Fires extinguished by chemicals.		Hand pumps used.	Transfers.	Special alarms.
												Hand.	Wagon.			
Engine Company:								<i>H. m.</i>	<i>Feet.</i>	<i>Feet.</i>	<i>Feet.</i>					
No. 1.....	198	9 2	...	...	...	...	52	60 15	34,500	...	...	20	14	1	2	...
No. 2.....	203	6 2	1	...	...	...	62	117 5	32,700	...	208	42	20	1	2	...
No. 3.....	182	8 3	2	...	...	...	33	66 20	18,500	...	100	9	11	14	1	...
No. 4.....	151	5	...	2	...	...	25	32 30	17,150	450	80	20	31	9	1	...
No. 5.....	92	1 2	3	...	...	...	69	71 50	24,900	50	200	21	19	19	3	...
No. 6.....	230	6 3	2	...	...	...	38	68 00	29,300	50	20	15	10	...	2	...
No. 7.....	221	4 6	...	...	...	...	48	37 30	26,650	150	288	35	57	30	8	...
No. 8.....	202	1 5	1	...	...	...	37	49 30	22,800	100	187	27	23	18	10	...
No. 9.....	138	3 3	1	...	...	...	50	37 35	42,850	50	48	12	16	14	2	...
No. 10.....	145	1 1	3	...	...	...	35	53 15	20,550	100	172	40	20	9	5	...
No. 11.....	119	1 1	4	1	...	...	62	37 15	18,950	200	56	20	13	5	...	...
No. 12.....	168	2 6	1	...	...	...	32	47 45	22,650	100	124	19	25	5	4	...
No. 13.....	89	7 4	1	1	...	...	13	28 00	10,400	350	...	12	16	0	3	...
No. 14.....	193	2	...	2	...	...	45	120 45	34,900	...	264	20	30	9	...	...
No. 15.....	34	...	1	1	...	...	16	27 00	10,700	150	56	7	8	8	2	...
No. 16.....	163	2	2	...	...	...	21	78 40	18,350	200	56	12	16	3	2	1
No. 17.....	26	...	1	...	...	...	9	8 15	5,850	...	42	3	2	2	2	...
No. 18.....	140	2	1	1	...	...	21	27 30	16,250	250	16	6	3	3	3	...
No. 19.....	32	...	...	1	...	...	16	10 00	2,650	50	...	4	3	2	2	...
No. 20.....	20	...	...	1	...	...	38	14 15	11,400	...	18	7	3	3	2	...
No. 21.....	104	4	...	3	1	...	28	32 00	16,800	400	12	5	3	5	1	...
No. 22.....	31	1	1	1	...	...	49	18 50	11,350	100	...	12	6	2	4	...
No. 23.....	119	3 6	1	...	...	...	24	47 20	29,150	50	140	7	16	4	5	...
No. 24.....	91	2 1	2	2	...	...	36	34 45	16,100	50	48	18	8	27	4	...
No. 25.....	29	...	...	1	...	...	31	21 15	13,750	350	...	9	6	3	3	...
No. 26.....	24	...	1	...	...	...	9	10 45	6,650	50	84	2	5	2	1	...
No. 27.....	23	1	...	1	...	...	13	12 30	7,300	150	64	5	2	1	2	...
No. 28.....	27	4 1	1	1	...	...	49	19 15	12,900	...	60	10	6	0	10	...
Truck Company:																
No. 1.....	137	2 2	1	1	...	...	17	...	...	...	2,212	...	...	1	2	...
No. 2.....	160	...	...	1	1	...	44	...	...	...	2,601	22	...	10	6	...
No. 3.....	162	3	1	1	...	...	40	...	...	...	3,909	3	...	...	3	...
No. 4.....	275	9	1	2	...	...	47	...	...	...	2,797	14	...	3	1	...
No. 5.....	32	1	...	...	1	...	24	...	...	...	547	2	...	5	7	...
No. 6.....	98	1	...	1	3	...	50	...	...	...	1,171	5	...	...	2	...
No. 7.....	136	1	1	2	...	...	34	...	...	...	1,494	11	...	3	6	...
No. 8.....	25	...	...	...	1	...	6	...	...	...	186	...	...	...	1	...
No. 9.....	50	2	...	2	...	...	20	...	...	...	846	...	...	...	3	1
No. 10.....	111	2 5	...	1	...	...	10	...	...	...	1,338	6	...	6	6	...
No. 11.....	23	...	...	1	...	...	23	...	...	...	295	...	...	1	2	...
No. 12.....	16	...	...	2	...	...	16	...	...	...	370	...	...	...	...	...
Fire Boat No. 1	1 22	...	...	...	...	...	9	3 00	750	...	...	...	...	...	...	...
Water tower.....	15	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...

¹ Fire boat made 12 special trips, breaking ice and rendering other services.

TABLE NO. 2.—*Causes for which alarms of fire were sounded during the fiscal year ending June 30, 1922.*

	Number.		Number
Alarms, erroneous.....	1	Chimney, soot in, sparks from, smoke, defective.....	151
Alarms, false.....	181	Clothes hanging over or too near stove.....	5
Alarms, no fire:		Coal, hot, igniting clothing, floors.....	3
Ammonia pipe leaking.....	1	Electric coil in dough-mixing machine igniting grease.....	1
Air valve blowing off radiator.....	1	Electric fan, heat from motor igniting enamel.....	1
Automatic fire alarm ringing off.....	1	Electric light igniting material near or on same.....	2
Barge sinking.....	1	Electric motor short circuiting.....	1
Boat drifting from wharf.....	1	Electric oven, current left on.....	1
Brick wall hot from stove.....	1	Electric wires igniting gas while fixtures were being changed from gas to electric fixtures.....	1
Children in sewer.....	1	Electric wires short circuiting.....	40
Chimney hood hanging from roof.....	1	Electric wires short circuiting in street cars.....	2
Coal bin falling on child.....	1	Exhaust from steam pipe.....	1
Coal gas in house.....	1	Exhaust pipe igniting gasoline.....	1
Cow in well.....	1	Fat, grease, meat, foodstuff, and laundry burning on stoves.....	29
Down spout flooding cellar.....	1	Film igniting in film machine.....	2
Gasket blowing out of ammonia pipe.....	3	Fires outside of District of Columbia.....	29
Government boat stuck in mud.....	1	Fireplace igniting woodwork.....	6
Hot-water boiler bursted.....	1	Fireworks, firecrackers, sparklers.....	7
Insane woman in tree top.....	1	Friction from wheels of hay wagon.....	1
Man fell from second story window.....	1	Furnace pipes overheated.....	3
Roofs collapsing.....	4	Gas burning under shoe-stitching machine.....	1
Safety valve blowing off.....	1	Gas burner back firing.....	1
Sewer filling basement with water.....	1	Gas connection blazing.....	1
Snow on roof about to avalanche.....	1	Gas engine, exhaust pipe overheated.....	1
Steam escaping.....	10	Gas fixtures broken, electric wires in same igniting gas.....	1
Tree fallen over roof of bungalow.....	1	Gas heater igniting.....	1
Tugboat and pontoons jammed against bridge.....	1	Gas jets igniting woodwork, curtains, and drapery.....	30
Water heater bursted.....	1	Gas mantle broken and igniting.....	1
Alcohol vapor igniting from lamp.....	1	Gas meter being thawed out.....	2
Ashes, hot, put in and against combustibles.....	25	Gas pipe leaking and afire.....	7
Asphalt under fireplace overheated.....	1	Gasoline blowtorch catching fire.....	1
Asphaltum boiling over and igniting.....	1	Gasoline, careless use of.....	10
Automobiles:		Gasoline dropping on hot exhaust pipe.....	2
Automobile colliding with post.....	1	Gasoline fumes igniting in grease trap.....	1
Automobile falling into ditch.....	1	Grease igniting from smokehouse.....	1
Auto truck ran into store.....	1	Grease in ventilator stack igniting.....	2
Backfiring.....	65	Grease stack igniting.....	2
Brake lining igniting from friction.....	1	Hot-water boiler exploding.....	1
Burning out carbon, filling house with smoke.....	1	Hot-water heater, soot in.....	1
Carburetors, leaking, flooding.....	7	Incendiary.....	2
Collision between 2 cars.....	3	Iron (electric) current left on.....	5
Electric wires short circuiting.....	96	Iron (laundry) left on inflammable material.....	3
Exhaust pipe overheated.....	6	Kerosene oil, careless use of.....	1
Friction from brake on wheels.....	1	Kerosene and paraffin boiling over on stove.....	1
Gasoline dropping on hot exhaust pipe.....	17	Kindling fires with kerosene.....	1
Gasoline dropping on hot motor.....	1	Lamps (kerosene) exploded, overheated, upset, too near inflammable material, thrown.....	25
Gasoline dropping on hot muffler.....	1	Lightning, struck by.....	4
Gasoline pipe disconnected, igniting.....	7	Lime slacking.....	4
Gasoline tank overflowing.....	1	Matches:	
Gasoline torch igniting truck body while burning off paint.....	2	Careless use of.....	218
Grease dropping on hot muffler.....	1	Children playing with.....	51
Grease pan becoming ignited.....	1	Rats causing matches to light.....	21
Hose on presto light blowing off.....	1	Spark from.....	25
Overheated muffler, motor.....	6	Motor cycle igniting shed.....	1
Rags stuffed in hole in floor of car, igniting.....	1	Miscellaneous fires.....	2
Spark from electric drill.....	1	No coal heater, oil turned on before lighting pilot.....	1
Trash burning, igniting truck.....	1	Paint in bucket overheated, igniting roof.....	1
Truck fell over embankment.....	1	Paper burning in garbage chute.....	1
Bake oven igniting flour sacks thrown on same.....	1	Paper burning in incinerator.....	4
Belt slipping from ice machine causing motor to burn.....	1	Paper burning in furnace igniting bed against register.....	1
Blow torch igniting gasoline.....	1	Paper (large amount) burning in stove, igniting floor.....	1
Birds' nest in old chimney igniting.....	1	Paper burning off stovepipe hole, igniting room.....	3
Birds' nest in cupola catching fire.....	1	Paper chute being burned out.....	1
Boiler overheated.....	1	Paper falling from furnace.....	2
Boiler (steam) placed on concrete slab on joists, igniting joists.....	1	Paper igniting on top of heater.....	1
Bonfires.....	5		
Brush, grass, leaves and trash, igniting.....	223		
Bunsen burner igniting woodwork.....	4		
Candles (sulphur, wax), careless use of.....	14		
Chemicals exploding.....	1		
Children playing with fire.....	14		

TABLE NO. 2.—*Causes for which alarms of fire were sounded during the fiscal year ending June 30, 1922—Continued.*

	Num-ber.		Num-ber.
Peanut roaster overheated.....	1	Stove (alcohol) exploding.....	1
Plaster falling on lighted gas jet.....	1	Stoves (coal) explosion of, overheated, too close to inflammable material, upset.....	35
Rag igniting on steam heating pipe.....	1	Stove (coal) water back exploding.....	1
Rag ignited while cleaning stove.....	1	Stove (gas) igniting clothes on persons.....	2
Register of furnace igniting board.....	1	Stoves (gas) too close to inflammable material, overheated, explosion of, left burning.....	17
Rekindling of old fire.....	10	Stoves (gasoline), explosion of, overflowing.....	1
Rubber hose becoming disconnected from gas heater.....	1	Stoves (kerosene) exploding, leaking, overflowing, too close to inflammable material, upsetting.....	35
Sent to wrong location.....	196	Stovepipe disconnected.....	1
Smoking, careless.....	62	Stovepipe placed through wooden roof.....	1
Smoke from chimneys, furnaces, incinerators, burning oil, stoves, smokehouses, trash.....	1	Suspicious.....	13
Smokepipe connected to flue for hot-air pipe.....	3	Sun's rays shining through plate-glass show window, igniting box.....	1
Smokepipe defective, disconnected.....	1	Tank (kerosene).....	1
Smokepipe igniting paper boxes.....	6	Tar on road ignited.....	1
Smokepipe, overheated.....	2	Tar pot boiling over.....	6
Smokepipe, soot in.....	5	Tinners pot igniting floor.....	1
Smokepipe too near ceilings and partitions.....	12	Turpentine spilling on floor and igniting from gas range.....	1
Sparks from burning trash, paper.....	1	Turpentine and oil being heated over gas jet and igniting.....	1
Spark from cupola.....	3	Two boxes pulled for same fire.....	5
Spark from electric motor.....	11	Unknown.....	10
Spark from emery wheel.....	4	Ventilator stack overheated.....	1
Sparks from incinerator.....	1	Wax boiling over on stove and igniting.....	1
Sparks from piece of steel.....	3	Whisky still setting house afire.....	1
Sparks from smokestack.....	1		
Spark from shovel.....	30		
Sparks from stoves, furnaces, open fireplaces.....	1		
Sparks from tinners charcoal.....	3		
Sparks from chimney hole.....	18		
Spontaneous combustion.....	1		
Static electricity.....	2		
Steampipe, overheated.....			1, 997